



COMPUTER TOOLS

for Planning, Conservation & Environmental Protection

Article 5

In an effort to increase awareness of Internet resources available to local governments and citizen planners the Wisconsin Department of Natural Resources (DNR) has initiated a technical assistance program focused on computer tools for planning, conservation, and environmental protection. This program has been made possible by a water quality management grant awarded to the DNR by the U.S. Environmental Protection Agency (EPA).

As part of our technical assistance program we have developed this series of articles. **Each article will highlight a different tool, discuss its possible uses, and offer step-by-step tutorials.** It is our hope that the information provided here will insure that all involved in local planning processes have equal access to valuable information and analysis tools. Gaining access to these free web-based planning tools will assist communities with preliminary selection of alternative approaches to watershed and community planning. When community planners, developers, and citizens have access to similar information they are more readily able to interact and jointly discover possible solutions to land use issues.

This series of articles can be found online at <http://dnr.wi.gov/org/es/science/landuse/CompTools/local.htm>

Definition of a Tool – Interactive Mapping

To help evaluate the available tools, we have sorted them into three categories—data access, interactive mapping, and predictive modeling. The first article in this series covered the data access tool, Window to My Environment. This second article focuses on interactive mapping tools.

The development and availability of web-mapping software in the late 1990s spawned a proliferation of Internet sites that enable citizens to access government-maintained data and information useful in local environmental protection and planning. The resulting interactive data mapping tools allow people to access downloadable data, integrate that data spatially, zoom-in on areas of interest, query the associated databases, search for selected data, and produce customizable maps. Since the mapping tools are data driven, they access “real time” data and ensure the most current information is used (i.e. as the data and databases used to create the maps are updated and change, so do the maps).

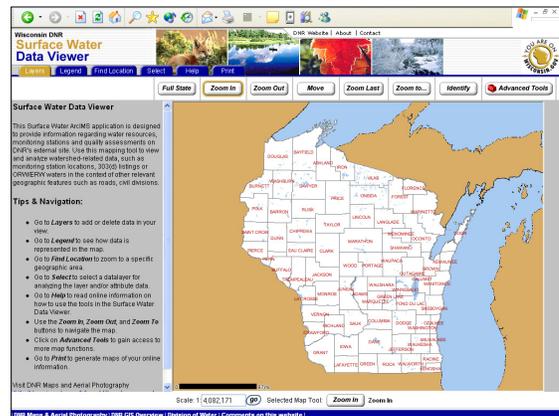
Maps add a visual element to the planning process and can be an effective way to communicate consequences of land use decisions. Such tools enhance community participation when people can see potential changes in relation to where they live.

Wisconsin DNR Surface Water Data Viewer

The Wisconsin DNR Surface Water Data Viewer provides information regarding water resources, monitoring stations and quality assessments. Use this mapping tool to view and analyze watershed-related data, such as monitoring station locations, 303(d) listings, or Outstanding and Exceptional Resource Waters in the context of other relevant geographic features such as roads and civil divisions.

To Use the Viewer

Using your Internet browser, go to http://maps.dnr.state.wi.us/surfaceWater_Viewer When you open the Surface Water Data Viewer, you will see a map frame on the right, a number of blue tabs across the top, and white buttons directly above the map window. These buttons allow you to navigate in the map and identify features.



Here are some basic hints to help you get started. Before using any of these tools, click the tool button to activate it. The active button is highlighted in yellow and is also displayed below the map window.



Changes the extent of the map to show the entire state of Wisconsin.



Allows you to zoom into a particular area of interest to see more detail.

Two methods:

Click a point on the map you want to be the center of your selected area (zooms 2X).

or

Draw a box by clicking on a point then, keeping the mouse button depressed, stretch the box until it covers the area of interest then release the mouse button.



Clicking the map with the Zoom Out tool active causes the map to "back out" so you can see approximately 2X more with each click. The map will be centered at the point clicked.



Use this option to zoom to a specific area of interest, such as a county, city, or township/range/section.



Use the Move tool to pan through the area shown in the map window.

Click and hold cursor on map. Move mouse in the direction you want to drag the map then release the mouse button.



The Drill Down Identify tool displays information about each visible layer at the map position clicked. To use, simply click the map and view the results in the left window.



The advanced toolbar contains additional tools and functionality.

Important Tabs



This tab allows you to turn on/off layers. To use, check the box to turn layers on and uncheck to turn layers off. As you zoom in and out, many of the layers will turn on and off automatically.



This tab allows you to see the legend for each layer that appears on the map



This tab allows you to find features based on different options.



This tab allows you to select features using different query methods.



Click this tab for descriptions of how the white buttons work.



Click <Print> to create a printable version of your map. You can enter map title, select page size, and choose scale. After entering this information, click <OK>.

Example Use

1. Click <Find Location>. Choose "City or Village". Enter "Green Bay". Click <Go>.

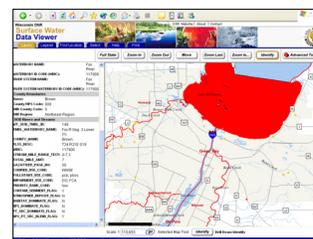
2. Click <Layers>. Expand the "Resource Management Data" folder by clicking on the folder icon. Turn on the "Impaired Waters (303D)" layer by checking its box.

3. Make the "Impaired Waters (303D)" layer active by clicking the Active Layer icon. 

4. Click the <Identify> tool to activate it.

5. On the map, click inside the Fox River.

6. Review the results in the left window.



For More Information:

www.dnr.state.wi.us/org/es/science/landuse
WDNR's land use website



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